

TITLE:	Chemistry	Chemistry
COURSE NO:	(H) 0366	(H) 0367
OFFERED:	1 st Semester	2 nd Semester

Teacher: Kerry Breinlinger

Classroom Number: 2112

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Extra-Help Night: Tuesday

Course Description: This is an introductory accelerated course in general chemistry requiring a strong foundation in mathematics. Topics covered will be similar to those studied in Chemistry (CP), but the material will be presented in greater depth and at an accelerated pace. The emphasis will be on the quantitative aspects of chemistry. Classwork will include the following: lectures, group discussions, demonstrations, laboratory work and research, problem solving sessions, and outside projects.

Academic Expectations from the Mission Statement:

- Select educational pathways consistent with interests, abilities, and goals.
- Assume responsibility for academic achievement.
- Acquire, interpret, analyze, integrate, and apply information in a discerning manner.
- Demonstrate the ability to use technology appropriate to the subject area.
- Exhibit the ability to read, write, communicate, and compute.

Reading Materials:

Primary textbook: Modern Chemistry (Holt, Rinehart and Winston) 2006

Supplemental reading/sources: Uncle Tungsten: Memories of a Chemical Boyhood by Oliver Sacks. 2001.

Course Outline: TIMELINE FOR CHEMISTRY

<i>Content Standards</i>	<i>Timeline</i>
Quantitative and Measurement Skills (includes metric system, conversions, scientific notation)	5 days
Properties of Matter (includes physical & chemical properties, substances, phase changes)	5 days
Atomic Structure (includes Atomic Theory, properties of protons, neutrons)	5 days
Nuclear Chemistry (includes properties of electrons)	5 days
Periodicity (includes electron configuration, valence electrons, periodic trends)	6 days
Chemical Bonding (includes ionic & covalent bonds, Lewis structures, VESPR)	6 days
Chemical Reactions (includes balancing equations, classifying equations)	8 days
<i>MID-TERM EXAMINATION</i>	
Stoichiometry (includes moles, empirical formulas, limiting reactants)	8 Days
States of Matter and Kinetic Theory (includes ideal gas law, gas laws, properties of solids & liquids)	8 Days
Thermochemistry (includes conservation of energy)	6 Days
Solutions, Rates of Reactions (includes like dissolves like, molarity, properties of solutions,)	8 Days
Equilibrium (includes equilibrium expressions)	5 Days
Acids & Bases (includes Arrhenius & Bronsted-Lowery theories, pH scale, buffers)	6 Days
Oxidation-Reduction Reactions (includes redox)	5 Days

FINAL EXAMINATION

Grading/Evaluation of Learning:

- Expectations: Students will be expected to be on time for class, to participate in class discussions, to safely perform all laboratory activities and show up for extra help if needed.
- Practices: The class is divided up two main sections: lecture and lab. During the lecture part of class, students will be presented with the topics in Chemistry as designated by the State and also will learn how the topics are applied to the everyday world through the use of examples, news articles, etc. During the lab portion, the students will perform lab activities on the major Chemistry topics under the guidance of the instructor.
- Rubrics: There are two types of rubrics used in this class. The first is the rubric used to grade tests, quizzes, and homework assignments where the grade given will be based on the percentage of correct answers vs. the total number of questions given. The second rubric will be based on the student's successful completion of projects and will incorporate such topics as "neatness", "documentation", "accuracy", and "originality". This type of rubric is designed to determine degrees of acceptability and understanding rather than just "right" and "wrong" answers.
- Homework, tests, quizzes, projects, papers, etc.: There are 3 main criteria for grading in the class. They include tests and quizzes, homework (bookwork and worksheets) and lab work (including lab reports, lab technique, and projects).

Materials: (what students are expected to bring to class each day): Book, pen, notebook, lab book, calculator.

Examination Schedule:

- Make-up sessions: Given at teacher's discretion. They will be given afterschool either the day of the students return or on teacher's late day. Homework will be due the day of the student's return. Laboratory activities are NOT made up due to safety concerns. An alternate assignment will be given on the topic being presented in the event of further absences.

Academic Integrity

Academic integrity provides the foundation for educational achievement and personal growth within Tantasqua's school community. Integrity guides the choices which lead toward honesty, respect, and responsibility. A student with academic integrity gains knowledge through hard work and honest effort. The result is genuine accomplishment and learning.

Academic Integrity promotes:

- positive relationships based on trust
- work that reflects one's own best effort
- respect for the intellectual property of others
- responsibility for one's own actions
- real learning

Violations of Academic Integrity

Violations of academic integrity include cheating and plagiarism.

Cheating is an unacceptable form of behavior. Real learning stops when cheating begins. It casts a shadow of doubt on the credibility of a student's academic performance preceding the cheating incident, and may have an effect on how people perceive the student for the consideration of future honors, awards, or letters of recommendation.

Test or homework dishonesty is the use of any means not specifically accepted by the teacher to obtain answers to a test, quiz, or homework assignment. Test or homework dishonesty includes giving, receiving, passing, or using *in any way* specific information about the test, quiz, or homework assignment, whether in oral or written form.

Plagiarism is the use of another person's words, ideas, or facts as if they were your own, without giving credit to the original source. Plagiarism may occur in any medium, including written composition, oral or artistic presentations, and technology. Plagiarism in any form is unacceptable. During the first weeks of school, teachers will clarify their specific policies on plagiarism.

Consequences

A student found in violation of academic integrity may face one or more of the following consequences:

- loss of credit for the assignment/paper/test, and a grade of zero
- notification of parent or guardian
- disciplinary referral to the assistant principal and resulting penalty

Repeated violations of academic integrity will result in:

- a meeting including the student, parent(s) or guardian(s), teacher, counselor, and/or an administrator
- loss of credit and a failing grade for the course